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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,944	11/17/2000	Dan Katcher	WMI-004CP2	9135

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EXAMINER
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KOENIG, ANDREW Y

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/715,944

**Applicant(s)**

KATCHER ET AL.

**Examiner**

Andrew Y Koenig

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 20-22 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>see attached sheet</u> .                                       | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

2. The following is a statement of reasons for the indication of allowable subject matter:

Prior art of record fails to teach or reasonably suggest a first thread is capable of adjusting a behavior of mask data and said second thread is capable of adjusting a behavior of object data. The use of threads is well known, however, there is no motivation to combine a teaching of threads in this particular manner.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,282,713 to Kitsukawa et al. (Kitsukawa).

Regarding claim 1, Kitsukawa teaches a tuner (fig. 3, label 21), a QPSK demodulator in communication with said tuner (fig. 3, label 22, col. 5, ll. 18-28), a video decoder in communication with said demodulator (fig. 3, label 25), a display device in communication with said demodulator (fig. 2, label 4, col. 5, ll. 29-55), an SRAM memory for storing annotation data (fig. 3, label 36, col. 6, ll. 5-13), a CPU (fig. 3, label 29) in communication with said demodulator. Kitsukawa teaches storing a computer program that controls when executed by said central processing unit, a display of said annotation data on said display device (col. 5, ll. 56-65). Kitsukawa teaches the use of SRAM (36), ROM (37), EEPROM (38), and SRAM (51, 52), which equates to the claimed memory.

Regarding claim 2, Kitsukawa teaches an integrated receiver/decoder (IRD), which equates to a viewer interaction device (fig. 2 and 3, label 2; col. 5, ll. 1-28), wherein Kitsukawa teaches the user selecting an advertisement mode, wherein the annotation data is displayed to the viewer (col. 6-7, ll. 65-21), which equates to displaying annotation data on said display device in response to a viewer activating said viewer activating said viewer interaction device (fig. 5-11).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,282,713 to Kitsukawa et al. (Kitsukawa) in view of U.S. Patent 6,615,408 to Kaiser et al. (Kaiser).

Regarding claim 3, Kitsukawa teaches selection of the advertisements (col. 8, ll. 17-57), but Kitsukawa is silent on teaches a memory for storing mask information, which is used by the computer program to identify regions on said display device. Kaiser teaches a placement zone that has a visual highlight of an image referencing a product (col. 10, ll. 4-8, col. 10, 22-30), which equates to mask information, which is used to identify regions on the display device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa by storing mask information, which is used by the computer program to identify regions on said display device as taught by Kaiser in order to permit interactive product behavior in a cost effective manner (Kaiser: col. 2, ll. 23-32).

Regarding claim 6, Kitsukawa teaches storing object information to display objects in a video frame on the display (fig. 4, col. 6, ll. 51-60).

Regarding claim 9, Kitsukawa teaches using a list of pointers (claimed object mapping table) for the addresses of advertising and coupon information, which equates to an object mapping table, wherein upon accessing the advertising and coupon information by the addresses in the table, the CPU can retrieve the data from the data buffer (51), which equates to an object property table referenced by said first identifiers (list of pointers), and said object property data including a first set of annotation data.

7. Claims 4, 5, 7, 8, 15-18, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,282,713 to Kitsukawa et al. (Kitsukawa) and U.S. Patent 6,615,408 to Kaiser et al. (Kaiser) in view of U.S. Patent 6,415,438 to Blackketter et al. (Blackketter).

Regarding claim 4, Kitsukawa is silent on the mask information comprising a time stamp. Kaiser teaches tracking an image through multiple frames (col. 10, ll. 22-30), which has some form of timing information. Blackketter teaches inserting triggers with a time attribute (col. 4, ll. 64-67), such as a frame number (col. 6, ll. 16-22), which equates to a time stamp. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitamura and Kaiser by using time information such as a frame number as taught by Blackketter in order to eliminate a delay loop (Blackketter: col. 2, ll. 59-61).

Regarding claim 5, the combination of Kitsukawa, Kaiser and Blackketter teaches a time stamp to display mask information in temporal relation to a video frame.

Regarding claim 7, Kitsukawa teaches storing timing data for the advertising information (col. 6, ll. 51-60), but is silent on a time stamp. Blackketter teaches inserting triggers with a time attribute (col. 4, ll. 64-67), such as a frame number (col. 6, ll. 16-22), which equates to a time stamp. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitamura and Kaiser by using time information such as a frame number as taught by Blackketter in order to eliminate a delay loop (Blackketter: col. 2, ll. 59-61).

Regarding claim 8, Kitsukawa and Kaiser are silent on indicating an expiration time. Blackketter teaches expiring triggers, which are indicative of the last instance the data structure is used (col. 3, ll. 13-22, col. 10, ll. 24-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by indicating an expiration time in order to ignore invalid triggers (Blackketter: col. 10, ll. 24-35). Kitsukawa, Kaiser and Blackketter are silent on removing the data structures. Official Notice is taken that removing expired information is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser and Blackketter by removing the data structures in order to conserve memory and efficiently manage the memory resources.

Regarding claim 15, Kitsukawa teaches an IRD (fig. 2, label 2), receive (fig. 3, label 21), decode (fig. 3, label 25), store (fig. 3, labels 36, 37, 38, 51, 52) and manipulate broadcast information by displaying advertisement information, central processor unit (fig. 3, label 29) and at least one memory devices, receiving a stream of broadcast information via the tuner; decoding said broadcast information to recover mask information (fig. 3, label 25). Kitsukawa is silent on mask information in a queue in said at least one memory devices. Kaiser teaches a placement zone that has a visual highlight of an image referencing a product (col. 10, ll. 4-8, col. 10, 22-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa by storing mask information, which is used by the computer program to identify regions on said display device as taught by Kaiser in order to permit interactive product behavior in a cost effective manner (Kaiser: col. 2, ll. 23-32).

Kitsukawa is silent on the mask information comprising a time stamp. Kaiser teaches tracking an image through multiple frames (col. 10, ll. 22-30), which has some form of timing information. Blackketter teaches inserting triggers with a time attribute (col. 4, ll. 64-67), such as a frame number (col. 6, ll. 16-22), which equates to a time stamp.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitamura and Kaiser by using time information such as a frame number as taught by Blackketter in order to eliminate a delay loop (Blackketter: col. 2, ll. 59-61). Kitsukawa is silent on comparing the time stamp with a time stamp of a displayed video frame; and displaying said mask based on a relationship between said mask time stamp and said time stamp of said displayed video. Kaiser teaches comparing the time of display to the actual display and displaying the mask accordingly (col. 6-7, ll. 34-4, col. 10, ll. 20-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa by comparing the time of display to the actual display and displaying the mask accordingly as taught by Kaiser in order to display information at the appropriate time while providing additional services and interactivity to the user.

Regarding claim 16, Kitsukawa teaches storing object information to display objects in a video frame on the display (fig. 4, col. 6, ll. 51-60). Kitsukawa teaches storing timing data for the advertising information (col. 6, ll. 51-60), but is silent on a time stamp. Blackketter teaches inserting triggers with a time attribute (col. 4, ll. 64-67), such as a frame number (col. 6, ll. 16-22), which equates to a time stamp. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was



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made to modify Kitamura and Kaiser by using time information such as a frame number as taught by Blacketter in order to eliminate a delay loop (Blacketter: col. 2, ll. 59-61). Kitsukawa, Kaiser and Blacketter are silent on the use of queues. Official Notice is taken that the use of queues is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa, Kaiser and Blacketter by using queues in order to properly process data in order, thereby conserving processing power to locate specific elements.

Regarding claim 17, Kitsukawa teaches a SRAM containing advertisement and coupon information (col. 6, ll. 5-18), but Kitsukawa, Kaiser and Blacketter are silent on the use of threads. Official Notice is taken that the use of threads is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa, Kaiser and Blacketter by using threads in order to process plural tasks simultaneously in a real time environment thereby increasing the efficiency of the system.

Regarding claim 18, Kitsukawa is silent on comparing the time stamp with a time stamp of a displayed video frame; and displaying said mask based on a relationship between said mask time stamp and said time stamp of said displayed video. Kaiser teaches comparing the time of display to the actual display and displaying the mask accordingly (col. 6-7, ll. 34-4, col. 10, ll. 20-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa by comparing the time of display to the actual display and displaying the mask

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accordingly as taught by Kaiser in order to display information at the appropriate time while providing additional services and interactivity to the user.

Regarding claim 20, Kitsukawa is silent on the use of masks. Kaiser teaches a placement zone that has a visual highlight of an image referencing a product (col. 10, ll. 4-8, col. 10, 22-30), which equates to mask information, which is used to identify regions on the display device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa by storing mask information, which is used by the computer program to identify regions on said display device as taught by Kaiser in order to permit interactive product behavior in a cost effective manner (Kaiser: col. 2, ll. 23-32). Kaiser clearly teaches decoding the mask into an image buffer, and displaying the program at the appropriate time. Logically, the mask would be displayed at the corresponding time, however, Kaiser is silent on sleeping for a time calculated to end at the time the mask is to be display. Official Notice is taken that determining the difference in time to perform an event is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa and Kaiser by determining the difference in time to perform an event in order to efficiently manage events thereby reducing the processing of the system by selectively querying the system clock.

Regarding claim 21, Kitsukawa teaches receiving advertising and coupon information, which is received from the broadcast transmitter (col. 6, ll. 5-18, col. 5, ll. 18-28), which equates to transmitting information in conjunction with a video signal for display in a temporal relation with the video signal. Kitsukawa is silent on the timing

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mechanism used to display the information and encoding mask information. Kaiser teaches a placement zone that has a visual highlight of an image referencing a product (col. 10, ll. 4-8, col. 10, 22-30), which equates to mask information, which is used to identify regions on the display device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa by encoding mask information as taught by Kaiser in order to permit interactive product behavior in a cost effective manner (Kaiser: col. 2, ll. 23-32). Blackketter teaches inserting triggers with a time attribute (col. 4, ll. 64-67), such as a frame number (col. 6, ll. 16-22), which equates to a time stamp. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitamura and Kaiser by using time information such as a frame number as taught by Blackketter in order to eliminate a delay loop (Blackketter: col. 2, ll. 59-61).

Regarding claim 22, Kitsukawa teaches encoding object information (col. 6, ll. 5-18) associated with the products and transmitting the objects with the video signal for display in a temporal relation with the video signal. Kitsukawa is silent on an object time stamp. Blackketter teaches inserting triggers with a time attribute (col. 4, ll. 64-67), such as a frame number (col. 6, ll. 16-22), which equates to a time stamp. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitamura and Kaiser by using time information such as a frame number as taught by Blackketter in order to eliminate a delay loop (Blackketter: col. 2, ll. 59-61).

8. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,282,713 to Kitsukawa et al. (Kitsukawa) and U.S. Patent 6,615,408 to Kaiser et al. (Kaiser) in view of U.S. Patent 5,889,746 to Moriyama et al.

Regarding claim 10 and 11, Kitsukawa and Kaiser are silent on the annotation data field is a title data field and the third data structure element is a string including the title of the object. Moriyama teaches a pointer to a text string wherein the text string can be the title (col. 15-16, ll. 65-31; see also fig. 9). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa and Kaiser by pointing to a string including the title as taught by Moriyama in order to efficiently manage variable length fields and manage the memory of the system.

Regarding claim 12, Kitsukawa teaches menus with display identifiers and actions associated with the display identifiers (fig. 5, col.17-57). However, Kitsukawa is silent on an annotation data menu field and the second identifier referencing a selector including a set of display identifiers and corresponding actions. Moriyama teaches identifying elements via pointers, as shown in figure 9. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa and Kaiser by identifying a display identifiers and actions via pointers as taught by Moriyama in order to efficiently manage dynamic resources.

Regarding claim 13, Kitsukawa and Kaiser are silent on never duplicating the first and second identifiers. Official Notice is taken that never duplicating identifiers is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa and Kaiser by never

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duplicating identifiers in order to appropriately reference the appropriate information thereby eliminating access to the incorrect data structure.

Regarding claim 14, Kitsukawa and Kaiser are silent on a variable value. Official Notice is taken that a variable values are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitsukawa and Kaiser by using variable values in order to efficiently manage the memory by dynamically referencing and allocating the memory.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y Koenig whose telephone number is (703) 306-0399. The examiner can normally be reached on M-Th (7:30 - 6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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